

REMARKS

As may be appreciated from the above listing of claims, the claims have also been amended. Authorization is provided herewith to pay any underpayment of fees or credit any overpayment of fees to Deposit Account No. 02-4800.

I. RESPONSE TO THE REJECTION OF CLAIMS 9-16 AND 18

In the Office Action dated April 13, 2009 (hereafter "the Office Action"), the Examiner rejected claims 9-12 and 13-16 and 17-18 as obvious in view of the combination of U.S. Patent Application No. 2002/0129150 to Jung and U.S. Patent Nos. 6,163,855 to Shrivastava et al. and 6,078,943 to Yu. (Office Action, at 2). Claim 12 was rejected as being obvious in view of Jung, Shrivastava et al. and U.S. Patent Application Publication No. 2002/0165964 to Chen et al.

A. Burden Of Proving Obviousness Under 35 U.S.C. § 103

"All words in a claim must be considered in judging the patentability of that claim against the prior art." MPEP § 2143.03 (emphasis added). "When evaluating claims for obviousness under 35 U.S.C. 103, all the limitations of the claims must be considered and given weight." MPEP § 2143.03. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." *Id.* "A 35 U.S.C. 103 rejection is based on 35 U.S.C. 102(a), 102(b), 102(e), etc. depending on the type of prior art reference used and its publication or issue date." MPEP § 2141.01.

To establish a *prima facie* case of obviousness, an Examiner must show that an invention would have been obvious to a person of ordinary skill in the art at the time of the invention. MPEP § 2141. "Obviousness is a question of law based on underlying factual inquiries." *Id.* The factual inquiries enunciated by the Court include "ascertaining the differences between the

claimed invention and the prior art" and "resolving the level of ordinary skill in the pertinent art." MPEP § 2141.

"A statement that modifications of the prior art to meet the claimed invention would have been 'well within the ordinary skill of the art at the time the claimed invention was made' because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references." MPEP § 2143.01. "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, **there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.**" MPEP § 2143.01 (citing *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396) (emphasis added).

For instance, an invention that permits the omission of necessary features and a retention of their function is an indicia of nonobviousness. *In re Edge*, 359 F.2d 896, 149 U.S.P.Q. 556 (CCPA 1966); MPEP 2144.04. A conclusory statement to the contrary is insufficient to rebut such an indicia of nonobviousness. *See* MPEP § 2143.01.

Moreover, "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." MPEP § 2143.01. Also, "the proposed modification cannot render the prior art unsatisfactory for its intended purpose." MPEP § 2143.01.

B. Claims 9-15 And Claims 19-23 Are Not Rendered Obvious By The Cited Art

Claim 9 requires a method for verifying an availability of a server to include transmitting a message regarding an availability of the server by a first client to a plurality of predefinable other clients and preventing the transmission of any availability request by the predefinable other clients to the server for at least a prescribable period of time. Claims 10-15 and 19-23 depend directly or indirectly from claim 9 and, therefore, also contain these limitations.

The Examiner correctly reads Jung as not including any teaching or suggestion of transmitting a message regarding an availability of the server by a client to other clients nor the prevention of a transmission of an availability request to the server by other clients for a predefinable period of time. (Office Action, at 3). However, the Examiner has construed Shrivastava et al. as teaching or suggesting such requirements. (Office Action, at 3).

1. Shrivastava et al. Do Not Teach Or Suggest Prevention of Availability Request Transmissions By Predefinable Other Clients

Shrivastava et al. disclose a system for communicating modification information to servers in a server cluster. (Abstract). The Examiner has asserted that Column 5, lines 25-37 suggest that availability request transmission be prevented. (Office Action, at 3). To the contrary, this portion of Shrivastava et al. makes it clear that no availability requests transmissions are prevented.

Shrivastava et al. disclose that a regroup event is initiated upon the detection of a communication failure. (Col. 5, lines 29-32). During the regroup event, writes to potentially shared devices are disabled until the membership is stabilized. (Col. 5, lines 32-34). As may be appreciated from at least the Abstract and from Column 6, lines 42-45, this "writes to potentially shared devices" statement refers to the sending of modification information to the shared

devices. For instance, the system disclosed by Shrivastava et al. is configured so that one of the servers in a cluster serves as a locker node. The "locker node 60 ensures that only one global update is in progress at any given time." (Col. 6, lines 43-45).

Indeed, Shrivastava et al. teach that during a regroup event, systems within a cluster 58 are checked to determine if a system can communicate with the other members of the cluster 58. (Col. 5, lines 34-36). Such communication verification is performed by the communications manager 76, which is configured to send "periodic messages, called heartbeats, to counterpart components on the other systems of the cluster 58 to provide a mechanism for detecting that the communications path is good and that the other systems are operational." (Col. 5, lines 18-21). These periodic messages are availability requests. A failure to respond to such a request indicates that the system is unavailable and is no longer grouped within the cluster 58. (Col. 5, lines 35-38).

Therefore, Shrivastava et al. clearly do teach or suggest that availability requests be sent between cluster members, or servers, even during a regrouping event that creates a stoppage of writes to potentially shared devices. Indeed, Shrivastava et al. teach that the monitoring of the communication paths via such availability requests are central to the ability of the servers in the cluster 58 to ensure communications paths are good and the other systems are operational.

As should be appreciated from the above, Shrivastava et al. clearly do not teach or suggest any prevention of sending availability requests to other predefinable clients. To the contrary, Shrivastava et al. teach such requests should be made often by all servers within a cluster to ensure operational communication paths are maintained.

As noted in the Office Action, neither Jung nor Yu teach or suggest the prevention of transmitting availability requests to a server by other predefinable clients as required by claims 9-15 and 19-23. Therefore, the combination of these references also fails to teach or suggest this limitation. None of the cited art teaches or suggests such prevention of availability request messages. Therefore, the cited art cannot render claims 9-15 and 19-23 obvious.

2. Shrivastava et al. Teach Away From Preventing Transmission Of Availability Requests By Predefinable Other Clients

Shrivastava et al. teach that the monitoring of the communication paths via availability requests exchanged between servers within a cluster is necessary to ensure communication paths are good and the other systems are operational. Shrivastava et al. also teach that such messaging needs to be exchanged during regroup events to ensure failed systems are failed over or handed off to one or more active systems. Such teaching is opposite the limitations of claims 9-15 and 19-23, which require that transmission of availability requests to a server by other clients be prevented to reduce the load on a server. Shrivastava et al. clearly teach away from such a requirement.

3. Granted European Patent No. EP 1 668 866 Is An Indicia Of Nonobviousness

EP 1 668 866 is a European patent that is related to the present application. The European Patent Office reviewed the prior art and found that the application submitted by applicant warranted patent protection and granted a patent to the assignee of the present application. For the Examiner's reference, a copy of this patent is provided herewith.

For at least the above discussed reasons, pending claims 9-15 and 19-23 are not rendered obvious by the cited art. Reconsideration and allowance of these claims is respectfully requested.

C. Claims 16, 18 And 24-29 Are Not Rendered Obvious By The Cited Art

Claim 16 requires a control program loaded into a RAM of a client to have code that causes the client to transmit a message regarding an availability of the server to a plurality of other clients. This message is configured to prevent transmission of availability requests by predefinable other clients to the server for a predefinable period of time.

Claim 18 requires a client to include a device configured to transmit a message regarding an availability of the server to a plurality of predefinable other clients. This message is configured to prevent a transmission of an availability request by any of the predefinable other clients to the server for a predefinable period of time if the confirmation message responding to the availability request is received by the client.

As discussed above with reference to claim 9, the cited art fails to teach or suggest a client having a device or program that is configured to prevent transmission of availability requests by other clients to the server for a time period. Indeed, the cited combination of art teaches away from such a client.

D. Claim 22 Is Allowable

Claim 22 depends from claim 9 and requires that one of the predefinable other clients transmit a collective availability request to a server if no multicast collective request has been received by that client within a predefined time period. None of the references cited by the

Examiner teach or suggest such a requirement. Therefore, claim 22 is patentable over the cited art.

E. Claim 24 Is Allowable

Claim 24 depends from claim 18 and requires a client to include a fourth device that is configured to monitor for receipt of a message from one of the predefinable other clients regarding availability of the server. None of the cited references teach or suggest a client that includes a monitoring device configured to detect a message from another client that relates to server availability. Therefore, claim 24 is allowable over the cited art.

F. Claim 29 Is Allowable

Claim 29 depends from claim 18 and further requires a client to include a fourth device configured to monitor reception of a message from another client about server availability and be configured to prevent transmission of an availability request to the server at least for a prescribable time interval upon receipt of such a message. None of the cited references teach or suggest such a fourth device or the prevention of the transmission of an availability request to a server upon receiving a server availability message from another client. Therefore, claim 29 is allowable over the cited art.

Application Serial No. 10/574,169
Amendment dated July 8, 2009
Response to Office Action dated April 13, 2009

II. CONCLUSION

For at least the above reasons, reconsideration and allowance of all pending claims is respectfully requested.

Respectfully submitted,

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Dated: July 8, 2009

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